IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

Wisconsin Resources Protection Council, Center for Biological Diversity, and Laura Gauger,

Plaintiffs,

v.

Case No. 11-cv-45

Flambeau Mining Company,

Defendant.

PLAINTIFFS' PROPOSED FINDINGS OF FACT FOR TRIAL

Plaintiffs Wisconsin Resources Protection Council, Center for Biological

Diversity, and Laura Gauger, by their undersigned counsel, respectfully submit these

Proposed Findings of Fact for Trial in accordance with the Court's Order in Non-Jury

Cases Assigned to Judge Crabb.

The Court has already found in its Opinion and Order on Summary Judgment most of material facts are not in dispute, including facts necessary to show that Defendant discharged pollutants from a point source without a permit. Plaintiffs incorporate those undisputed facts by reference and do not repeat them here. (Dkt # 137 pp 4-22). Thus the facts that follow address only the remaining issues for trial: (1)

whether pollutants discharged from the Biofilter¹ enter a water of the United States; and (2) what is the appropriate remedy for Defendant's violations of the Clean Water Act.

While these facts are organized under general headings for the Court's convenience, Plaintffs do not intend that facts may only be found related to the subject under which they are listed. For example, the history of discharges under "Discharge Events" may be relevant to "Remedy."

General Facts

- 1. An intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" flows over the Property at the southeast corner of the Industrial Outlot. [RFA 34]
- 2. Water that flows through the Biofitler's outlet enters the watershed of the intermittent waterway north of Copper Park Lane (and, to the extent that they are different waterways, the watershed of Stream C south of Copper Park Lane). [RFA 56].
- 3. There is a wetland immediately to the east of, and adjacent to, the Biofilter. This wetland is identified as "Wetland 7" in the Stantec Wetland Delineation Report. (Dep. Ex. No.) (Joint Ex. No.). (Joint Stip ¶1).
 - 4. Wetland 7 is approximately 1.42 acres in size. (Joint Stip ¶2)
 - 5. Water that flows out of the Biofilter flows into Wetland 7.
- 6. The intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" flows through Wetland 7.

¹ When Plaintiffs use the term "Biofilter" herein, they also intend it to include the "East Infiltration Basin," which is the successor name of the Biofilter.

- 7. The location and boundaries of Wetland 7 are correctly identified as a "field delineated wetland" on Joint Ex. No. (Joint Stip ¶3)
- 8. Wetland 7 was delineated by FMC's consultants, Stantec Consulting Services Inc., on May 17, 2010.
- 9. Wetland 7 meets the hydrotrophic vegetation, wetland hydrology, and hydric soils criteria for wetland delineation per the U.S. Army Corps of Engineers' Wetlands Delineation Manual (1987) and the U.S. Army Corps of Engineers' Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (2009). (Joint Stip ¶4)

Physical Nexus Between Wetland 7, Stream C, and the Flambeau River

- 10. The intermittent waterway north of Copper Park Lane, which is sometimes referred to as "Stream C," runs north to south through Wetland 7, along the western edge of the wetland.
- 11. The intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" is topographically the lowest area in Wetland 7.
- 12. When surface water is present in Wetland 7, including water discharged from the Biofilter, it will flow towards the intermittent waterway by the pull of gravity, and will then flow southwards through the waterway, underneath the culvert at Copper Park Lane, and into the segment of Stream C south of Copper Park Lane.
- 13. In addition to Wetland 7, the intermittent waterway north of Copper Park
 Lane that is sometimes referred to as "Stream C" collects drainage from an
 approximately 95 acre area comprised mostly of undeveloped woods and wetlands to

the east of Highway 27; from wetland areas to the west of Highway 27 north of the former rail spur; and from the ditches on the east and west sides of the highway.

- 14. Wetland 7 is seasonally inundated or saturated with water due to its connection with the intermittent waterway along its west border.
- 15. The intermittent waterway through Wetland 7 becomes visibly channelized when sufficient water is present, and when it reaches the culvert under a short stub road north of Copper Park Lane South of the stub road culvert, the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" is confined to a defined channel with a bed and banks and flows south through another culvert under Copper Park Lane and into the section of Stream C that flows south of Copper Park Lane.
- 16. Wetland 7 is hydrologically connected to the section of Stream C that flows south of Copper Park Lane, and to the Flambeau River, by the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" and the culverts underneath the stub road and Copper Park Lane.
- 17. Wetland areas within the Stream C watershed both east of Highway 27 and north of the former rail spur are also hydrologically connected to Stream C south of Copper Park Lane and the Flambeau River.
- 18. There is a continuous surface connection between Wetland 7, the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C," Stream C south of Copper Park Lane, and the Flambeau River.

- 19. There are no intercepting features or physical barriers preventing or obstructing the flow of water from the Biofilter, through Wetland 7, into the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C", and into the segment of Stream C that flows south of Copper Park Lane.
- 20. Wetland 7 is adjacent to the section of Stream C that flows south of Copper Park Lane.
- 21. When there is flow from the Biofilter, it flows towards the lowest point in Wetland 7, which is the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C."
- 22. The distance from the Biofilter's outlet to the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" (through Wetland 7) is approximately 25-30 feet.
- 23. The length of the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C" from near the Biofilter outlet to Copper Park Lane is approximately 75 yards.
- 24. The length of Stream C between Copper Park Lane and the Flambeau River is 0.39 miles.
- 25. The total distance from Wetland 7 to the Flambeau River is less than $\frac{1}{2}$ mile.

<u>Chemical and Biological Nexus Between Wetland 7, Stream C, and the Flambeau River</u>

- 26. Copper and zinc from areas upstream of the Biofilter's outlet and north of the former rail spur are transported through Wetland 7, along the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C," into the section of Stream C that flows south of Copper Park Lane, and to the Flambeau River.
- 27. The surface waters throughout the Stream C watershed, including areas both north and south of the Biofilter, are slightly acidic, which contributes to increased mobility of copper in surface water.
- 28. Most of the copper measured in the Stream C watershed is dissolved copper, which means the copper will move with the water and go wherever the water goes.
- 29. Copper in the water discharged from the Biofilter is transported by flowing water through Wetland 7, including into the intermittent waterway north of Copper Park Lane that is sometimes referred to as "Stream C", and southwards into the section of Stream C that flows south of Copper Park Lane.
- 30. The fish and other aquatic life in Stream C south of Copper Park Lane depend on dissolved oxygen to live.
- 31. Drainage from wetlands in the Stream C watershed north of Copper Park Lane, including Wetland 7, influences the concentration of dissolved oxygen in Stream C south of Copper Park Lane, which in turn influences the composition of fish species in Stream C south of Copper Park Lane.

- 32. Some aquatic organisms become stressed at dissolved oxygen concentrations of less than 5 mg/L, and would be unable to survive at extremely low dissolved oxygen levels.
- 33. In June 2011, the dissolved oxygen concentrations measured at six out of the eight DNR sampling locations in the Stream C watershed was less than 5 mg/L.
- 34. Stream C is more influenced by wetland drainage than the DNR's nearby reference stream, which results in lower dissolved oxygen concentrations in Stream C as compared to the DNR's nearby reference stream.
- 35. Organic matter in the wetland areas of the Stream C watershed, including Wetland 7, decomposes in warmer months, consuming oxygen in the process, and contributing to lower dissolved oxygen concentrations in Stream C south of Copper Park Lane.
- 36. A larger percentage of fish in Stream C south of Copper Park Lane than in DNR's nearby reference stream are species tolerant of low dissolved oxygen conditions.
- 37. Three species of fish tolerant of low dissolved oxygen conditions brook stickleback, central mudminnow, and fathead minnows were identified by DNR in Stream C south of Copper Park Lane in 2011.
- 38. Several fish of the same three species tolerant of low dissolved oxygen conditions were also identified by DNR in the Biofilter itself.
- 39. Dissolved organic matter is produced by the decomposition of organic matter. Wetland areas in the Stream C watershed north of Copper Park Lane are the main source of dissolved organic matter in Stream C south of Copper Park Lane.

- 40. The toxicity of copper to aquatic organisms in Stream C south of Copper Park Lane is reduced by the presence of dissolved organic matter contributed by upstream wetlands, including Wetland 7. Dissolved copper can attach to dissolved organic matter, keeping the copper in dissolved form, and making it unavailable for uptake by aquatic organisms.
- 41. DNR's nearby reference stream has less wetland influence, and also has less dissolved organic carbon, than does Stream C south of Copper Park Lane.
- 42. DNR's nearby reference stream has lower concentrations of copper and zinc, and also greater numbers of metals-sensitive macroinvertebrates, than does Stream C south of Copper Park Lane.

FMC's Application and Acceptance of a CWA § 404 Permit for Construction Activities in wetlands, including Wetland 7.

- 43. In 2011, FMC applied for coverage under a U.S. Army Corps of Engineers ("ACOE") General CWA § 404 Permit for construction activities in wetland areas located in the Industrial Outlot, including the wetland adjacent to and immediately to the north of Wetland 7.
- 44. On July 6, 2011, an employee of the ACOE visited the Flambeau Mine site for the purpose of determining whether any of the wetlands at the site may be waters of the United States.
- 45. On July 7, 2011, ACOE made a Preliminary Jurisdictional Determination indicating that wetlands in the Industrial Outlot in the Stream C watershed may be "waters of the United States" subject to CWA jurisdiction.

- 46. By letter dated July 15, 2011, FMC received authorization from the ACOE to discharge fill material into approximately 500 square feet of wetlands in the Industrial Outlot and in the Stream C watershed for the construction of an earthen diversion berm pursuant to General CWA § 404 Permit No. GP-002-WI. That letter included a copy of the ACOE's July 7, 2011 Preliminary Jurisdictional Determination.
- 47. After receiving ACOE authorization to discharge fill material to waters of the United States under ACOE General Permit No. GP-002-WI and a copy of the Preliminary Jurisdictional Determination Form, FMC did not seek an Approved Jurisdictional Determination from the ACOE for Wetland 7, but instead undertook construction activities in Wetland 7 pursuant to General Permit No. GP-002-WI in March and April, 2012.

Discharge Events

- 48. On all occasions when a discharge from the Biofilter occurs, water that flows out of the Biofilter flows into Wetland 7, which drains via the intermittent waterway north of Copper Park Lane (that is sometimes referred to as "Stream C") into the section of Stream C that flows south of Copper Park Lane.
- 49. On some occasions when a discharge from the Biofilter occurs, water that flows out of the Biofilter flows directly into the intermittent waterway north of Copper Park Lane, through Wetland 7, and then into the channelized section of Stream C that exists south of Copper Park Lane.
 - 50. Water flowed out of the Biofilter on June 5, 2002.
 - 51. Water flowed out of the Biofilter on April 19, 2004. (Joint Stip ¶5)

- 52. The concentration of copper measured at the Biofilter Outlet on April 19, 2004 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶6)
 - 53. Water flowed out of the Biofilter on September 15, 2004. (Joint Stip ¶7)
- 54. The concentration of copper measured at the Biofilter Outlet on September 15, 2004 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶8)
 - 55. Water flowed out of the Biofilter on October 23, 2004. (Joint Stip ¶9)
- 56. The concentration of copper measured at the Biofilter Outlet on October 23, 2004 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶10)
 - 57. Water flowed out of the Biofilter on April 6, 2005.
 - 58. Water flowed out of the Biofilter on April 26, 2005. (Joint Stip ¶11)
- 59. The concentration of copper measured at the Biofilter Outlet on April 26 2005 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶12)
 - 60. Water flowed out of the Biofilter on June 9, 2005. (Joint Stip ¶13)
 - 61. Water flowed out of the Biofilter on August 3, 2006. (Joint Stip ¶14)
 - 62. Water flowed out of the Biofilter on October 4, 2006. (Joint Stip ¶15)
- 63. The concentration of copper measured at the Biofilter Outlet on October 4, 2006 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶16)
 - 64. Water flowed out of the Biofilter on November 28, 2006. (Joint Stip ¶17)
- 65. The concentration of copper measured at the Biofilter Outlet on November 28, 2006 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶18)

- 66. Water flowed out of the Biofilter on May 24, 2007. (Joint Stip ¶19)
- 67. The concentration of copper measured at the Biofilter Outlet on May 24, 2007 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶20)
 - 68. Water flowed out of the Biofilter on August 21, 2007.
 - 69. Water flowed out of the Biofilter on September 21, 2007. (Joint Stip ¶21)
- 70. The concentration of copper measured at the Biofilter Outlet on September 21, 2007 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶22)
 - 71. Water flowed out of the Biofilter on April 25, 2008. (Joint Stip ¶23)
- 72. The concentration of copper measured at the Biofilter Outlet on April 25, 2008 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶24)
 - 73. Water flowed out of the Biofilter on June 8, 2008.
 - 74. Water flowed out of the Biofilter on October 27, 2008. (Joint Stip ¶25)
 - 75. Water flowed out of the Biofilter on April 25, 2009. (Joint Stip ¶26)
- 76. The concentration of copper measured at the Biofilter Outlet on April 25, 2009 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶27)
 - 77. Water flowed out of the Biofilter on October 3, 2009. (Joint Stip ¶28)
- 78. The concentration of copper measured at the Biofilter Outlet on October 3, 2009 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶29)
 - 79. Water flowed out of the Biofilter on April 16, 2010. (Joint Stip ¶30)
- 80. The concentration of copper measured at the Biofilter Outlet on April 16, 2010 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶31)

- 81. Water flowed out of the Biofilter on September 17, 2010. (Joint Stip ¶32)
- 82. The concentration of copper measured at the Biofilter Outlet on September 17, 2010 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶33)
 - 83. Water flowed out of the Biofilter on September 27, 2010.
 - 84. Water flowed out of the Biofilter on October 26, 2010.
- 85. The concentration of copper measured at the Biofilter Outlet on October 26, 2010 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶34)
 - 86. Water flowed out of the Biofilter on April 26, 2011.
- 87. The concentration of copper measured at the Biofilter Outlet on April 26, 2011 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶35)
 - 88. Water flowed out of the Biofilter on April 27, 2011. (Joint Stip ¶36)
- 89. The concentration of copper measured at the Biofilter Outlet on April 27, 2011 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶37)
 - 90. Water flowed out of the Biofilter on June 19, 2011.
- 91. The concentration of copper measured at the Biofilter Outlet on June 19, 2011 was higher than Wisconsin's Acute Toxicity Criterion for copper.
 - 92. Water flowed out of the Biofilter on September 27, 2011. (Joint Stip ¶38)
- 93. The concentration of copper measured at the Biofilter Outlet on September 27, 2011 was higher than Wisconsin's Acute Toxicity Criterion for copper. (Joint Stip ¶39)

94. On each of the following dates, the water samples taken at the Biofilter's Outlet, in the intermittent waterway south of the Biofilter's Outlet but north of Copper Park Lane, and in the section of Stream C that flows south of Copper Park Lane contained copper concentrations that were higher than Wisconsin's acute toxicity criterion for copper: April 25, 2008, October 27, 2008, April 25, 2009, October 3, 2009, April 16, 2010, September 17, 2010, October 26, 2010, and April 26, 2011, April 27, 2011, June 19, 2011, and September 27, 2011.

Remedies

- 95. The maximum daily penalty under 33 U.S.C. § 1319(d) for each of Defendant's violations is warranted.
- 96. The Wisconsin Department of Natural Resources has proposed to include the 0.39-mile segment of Stream C from Copper Park Lane to the Flambeau River on its 2012 list of "impaired waters" pursuant to CWA § 303(d) for copper and zinc acute aquatic toxicity.
 - 97. FMC does not presently hold an NPDES or a WPDES permit.
- 98. FMC's Mining Permit does not include specific effluent limitations for copper or zinc.
- 99. FMC's Surface Reclamation Plan does not include specific effluent limitations for copper or zinc.
- 100. FMC is aware that the terms of its mining permit are more permissive than a WPDES permit would be for stormwater runoff.

- 101. The cost of obtaining a WPDES permit for FMC's stormwater discharges would be approximately \$10,000 \$20,000.
- 102. The annual cost of complying with a WPDES permit for FMC's stormwater discharges would be approximately \$10,000.
- 103. FMC is a wholly owned subsidiary of Rio Tinto plc, which is a public company registered on the London Stock Exchange.

Respectfully submitted this 14th day of May, 2012.

/s/James N. Saul

James N. Saul
Christa O. Westerberg
David C. Bender
Pamela R. McGillivray
McGillivray Westerberg & Bender LLC
211 S. Paterson Street, Suite 302
Madison, WI 53703
608.310.3560 (Ph)
saul@mwbattorneys.com
westerberg@mwbattorneys.com
bender@mwbattorneys.com
mcgillivray@mwbattorneys.com

Daniel P. Mensher Kevin M. Cassidy Pacific Environmental Advocacy Center Lewis & Clark Law School 10015 SW Terwilliger Blvd. Portland, OR 97219 (503) 768-6926 dmensher@lclark.edu cassidy@lclark.edu

Marc D. Fink Center for Biological Diversity 209 East 7th St. Duluth, MN 55805 (218) 525-3884 mfink@biologicaldiversity.org